RCRA Compliance Evaluation Inspection Report

BAYER CROPSCIENCE
ROUTE 25 @ I-64
INSTITUTE, WV 25112

Telephone Number: (304) 767-6866

Inspection Dates:
March 1 & 2, 2011

RCRA Identification Number: WVD005005509

EPA Representative:	Jeffrey A. Dodd, Inspector Office of Enforcement, Compliance and Environmental Justice (304) 234-0254
State Representatives:	Paul Ancion, Environmental Inspector WVDEP (304) 926-0499 ext. 1315
Facility Representatives:	R. Lennie Scott, Environmental Mgr. Ray Stuart, Env. Compliance Specialist Bayer CropScience (304) 767-6866

April 15, 2011

Background

On March 1 and 2, 2011, the United States Environmental Protection Agency, Region III ("EPA"), Office of Enforcement, Compliance and Environmental Justice conducted an unannounced Compliance Evaluation Inspection ("CEI") under the Resource Conservation and Recovery Act ("RCRA"), as amended, 42 U.S.C. Sections 6901 et seq. of the Bayer CropScience ("Bayer") facility. USEPA Inspector Jeffrey Dodd was accompanied by West Virginia Department of Environmental Protection ("WVDEP") Inspector Paul Ancion. The facility was represented by R. Lennie Scott, Environmental Manager and Ray Stuart, Environmental Compliance Specialist for Bayer CropScience. Several other Bayer CropScience employees (Steve Graves, Fred Keeling, Lee Brandt and Doug Nye) also participated in the inspection during the tour of the facility. Several employees (Andy Altman, Janet Lawson, Cindy Elkins and Chuck Staley) for Dow/Union Carbide Corporation ("UCC") also participated during a tour of the facility since Dow/UCC, as a tenant a the Bayer CropScience, also generates hazardous waste at the facility which is managed under the Bayer CropScience's Institute, WV facility RCRA Generator identification number.

The inspection included an evaluation of Bayer's processes and compliance with federal environmental regulations. WVDEP representative, Paul Ancion was present to observe and provide assistance concerning evaluation of Bayer's processes and compliance with state environmental regulations. All information included in this report are the results of statements by the facility representatives, materials shown to the inspectors by the facility representatives during the inspection, information and documents provided during or shortly after the inspection at EPA's request, and a review of EPA and state records. An EPA TSD Facility checklist was completed during this inspection and is included in Attachment No. 1 to this report.

General Facility Information

The Bayer CropScience facility is located along the Kanawha River in Institute, WV on WV Route 25 @ Interstate 64. (See Attachment 2). The facility began operations circa 1940 as Union Carbide Corporation and changed ownership to Rhone-Poulenc Inc in 1986 to Aventis CropScience USA LP in 2000 and finally to Bayer CropScience LP in 2002. The facility is currently a multi-tenant industrial campus including operations conducted by Dow/UCC, Reagent Chemical, Bayer Polymer and Praxair. Bayer CropScience's operations at the site include manufacturing of various organic chemicals, agricultural chemicals and pesticides.

Permit Status

Bayer CropScience is a large quantity generator of hazardous waste under RCRA ID No. WVD005005509. Bayer CropScience also holds RCRA permit WVD005005509 from WVDEP for the storage of hazardous wastes in containers (permitted container storage area), storage of hazardous waste in above ground storage tanks, operation of a hazardous waste landfill and associated groundwater monitoring program, operation of a miscellaneous hazardous waste management unit (used to deactivate mobile containers containing activated carbon and

propylene oxide) and operation of two (2) boiler and industrial furnaces ("BIFs") which utilize hazardous waste as a fuel source. The permit was issued effective September 29, 2003 and expires on September 29, 2013. See Attachment 3 for a copy of the current permit.

The facility is permitted to store a wide variety of hazardous waste (characteristic wastes, F-wastes, K-wastes, U-wastes and P-wastes) in containers within the permitted container storage area. The permitted container storage area is subject to among other requirements weekly inspections, container storage placement requirements, keeping containers in a closed condition except when adding or removing waste and segregation of incompatible wastes. The Permit further prohibits the storage of any container of hazardous waste received from any off-site source as well as accumulation of waste in containers in the permitted storage area for over one (1) year unless approved by WVDEP. See Module III of Permit WVD005005509.

The facility is permitted to store hazardous waste from chemical manufacturing operations in four (4) above ground storage tanks (Tanks 1021, 1043, 1044 and 4623). The hazardous waste from these tanks is subsequently used for energy recovery in the facility's permitted hazardous waste burner and industrial furnace (BIF) units (see comments below). The wastes stored in the permitted tanks include a wide variety of hazardous wastes (characteristic wastes, F-wastes, K-wastes, U-wastes and P-wastes). The permitted hazardous waste storage tanks are required among other specifications to have adequate secondary containment, minimal tank shell thickness which must be tested every five (5) years, overfill prevention controls, daily operating inspection, subject to Subpart CC of 40 CFR § 264 (RCRA air emission regulations) and prohibits accumulation of waste in the permitted tanks over one (1) year unless approved by WVDEP. See Module IV of Permit WVD005005509.

The facility is permitted to operate a hazardous waste landfill, known as the Goff Mountain Landfill which is located north of WV Route 25 and adjacent to Goff Mountain Road. Operation of this landfill began prior to 1980 and has received hazardous and non-hazardous industrial wastes from the Institute Site, DOW/UCC South Charleston Plant and the DOW/UCC South Charleston Technical Center. The landfill is comprised of nine (9) former inactive disposal cells and one active cell which is currently receiving waste. In addition, the facility is in the process of constructing a new disposal cell for use. The nine (9) former disposal cells were constructed and used prior to 2001. These cells are unlined but have been capped (liner with clay top), vegetated and equipped with a leachate collection system and surface water run-on and run-off controls. The active disposal cell as well as the current cell under construction and any subsequent disposal cells constructed under the permit are required to have double bottom liners, leachate collection and leak detection systems. The permit allows for disposal of a wide variety of characteristic and listed hazardous wastes, specifies design and operating requirements, inspection and monitoring requirements and closure and post closure care of the landfill (See Module V of Permit WVD005005509. The permit prohibits disposal of hazardous waste from any off-site facility, certain F-code wastes (F020, F021, F022, F023, F026 and F027) or containerized or liquid wastes in the landfill. Prior to 1990 the facility may have received a wide variety of hazardous and non-hazardous wastes. Currently, the majority of waste being disposed of under the permit is wastewater treatment plant sludge (F039) and some non-hazardous waste

generated at the Bayer CropScience facility. Since 1990 only wastewater treatment plant sludge (F039) and non-hazardous waste has been placed in the landfill. The facility manifests all transfers of hazardous wastewater treatment plant sludge to the Goff Mountain Landfill.

The facility is required to conduct groundwater monitoring at the permitted hazardous waste landfill (Goff Mountain Landfill). The groundwater monitoring program is specified in Module VII of RCRA permit WVD005005509. The groundwater monitoring program includes the sampling of groundwater from two (2) aquifers beneath the site and includes a background (up gradient) and at least three (3) monitoring wells down gradient of the landfill. The RCRA permit specifies quarterly sampling and statistical analysis of the results, parameters of interest, sampling plan, sample collection procedures and required analytical procedures.

The facility is permitted to operate two (2) burner and industrial furnaces (Boilers #3 and #4 at the facility's No. 1 Powerhouse) using various ignitable hazardous waste streams as fuel to generate steam. The permit for operation of the BIFs is broken into two parts. RCRA Permit No. WVD005005509 specifies that the standards covered by 40 CFR 264 Subparts A (General), B (General Facility Standards), C (Preparedness and Prevention), D (Contingency Plan and Emergency Procedures), G (Closure and Postclosure), H (Financial Assurance) and J (Tank Systems) apply to the BIFs. A separate permit issued by the WVDEP Office of Air Quality specifies the operational requirements and air emission standards for the BIFs. See Module VIII of Permit WVD005005509. The facility utilizes ignitable hazardous waste generated by both Bayer CropScience and Dow/UCC at the Institute, WV facility and is permitted under the facility's air emissions permit for the BIFs to accept ignitable hazardous waste from other Bayer owned facilities. According to the facility representatives, only one off-site shipment of hazardous waste for energy recovery in the BIFs has been received in the past two (2) years.

The facility was permitted to operate a miscellaneous hazardous waste treatment unit for the purging of propylene oxide from spent activated carbon located in mobile steel containers. See Module VI of Permit WVD005005509 (Attachment 3). This miscellaneous permitted hazardous waste management was closed in January 2005 according to the closure plan for this unit. See Attachment 4.

As indicated above, Dow/UCC as a tenant a the Bayer CropScience, also generates hazardous waste at the facility which is managed under Bayer CropScience's Institute, WV facility RCRA Generator identification number. Due to the large size of the facility and time allotted for the inspection, Inspectors conducted a tour of Dow/UCC's hazardous waste storage containers, tanks and storage areas and reviewed recent hazardous waste manifests generated by Dow/UCC. Inspection and review of Dow/UCC's contingency plan, preparedness and prevention program, inspection logs or compliance with RCRA air emission regulations were not conducted as part of this inspection.

Inspection Observations – March 1, 2011

EPA Inspector Dodd began the inspection with presentation of official credentials and a full explanation of the scope and purpose of the RCRA CEI to R. Lennie Scott, Environmental Manager and Ray Stuart, Environmental Compliance Specialist for Bayer CropScience. EPA Inspector Dodd and WVDEP Inspector Ancion interviewed Mr. Scott and Mr. Stuart concerning generation and management of hazardous waste produced at the facility. The facility representatives provided a brief description of the facility background, processes, waste streams and waste management practices at the facility.

Process Overview

The facility produces various chemicals including but not limited to various organic chemicals, agricultural chemicals and pesticides. In general, the chemical production processes utilize various containers, vessels and reactors for batch production of desired materials and products. Essentially, raw materials are combined in reactors and vessels to produce various intermediate and final products. The facility is comprised of two main areas referred to as the east and west sides of the plant. The east side of the plant is comprised of units involved in the production of active ingredients for pesticides, e.g., Sevin, Aldocarb. The west side of the plant is comprised of production units involved in the production of agricultural chemical food supplements and other pesticide ingredients, e.g., Larvin and Carbosulfan. Within each of the aforementioned areas, there are several manufacturing units which produce final products (chemicals) or intermediate chemicals for use in other processes. In addition to the above production areas, the facility operates two (2) powerhouses, a waste water treatment plant, a hazardous and non-hazardous waste landfill (Goff Mountain Landfill), a permitted hazardous waste storage area and four (4) permitted hazardous waste storage tanks.

Raw Materials

The facility uses a wide variety of chemicals which include but is not limited to a wide variety of organic compounds, solvents, acids and bases. Attachment 5 contains the 2010 SARA 311 Hazardous Chemical Report for the facility which lists raw materials in use at the facility.

Waste Streams

The primary hazardous waste streams generated at the facility include sludge from the facility's waste water treatment plant (F039) which is transferred to the facility's permitted hazardous waste landfill (Goff Mountain Landfill), high content/high BTU organic waste residues from production processes which are burned in the facility's permitted BIF units for energy recovery, fly ash from the BIFs which is sent off-site for subsequent disposal and miscellaneous waste streams generated during process equipment cleanouts, contaminated personal protective equipment, off-spec chemical intermediates and products, contaminated soils and chemicals from spills and waste paint. The facility also generates waste oil from equipment and vehicle maintenance activities as well as universal waste bulbs and batteries. The facility's

2009 Biennial Hazardous Waste Report contains a concise description of the type and amount of waste produced at the facility. See Attachment 11.

There are numerous hazardous waste generation points, satellite hazardous waste accumulation areas, 90-day hazardous waste storage areas and permitted hazardous waste units at the facility. Attachment 6 provides a summary of the RCRA permitted and < 90 day hazardous waste storage areas at the facility. At the conclusion of the interview, Mr. Stuart escorted EPA Inspector Dodd and WVDEP Inspector Ancion on a tour of the facility. Pertinent observations concerning the storage and management of hazardous waste are provided below.

Goff Mountain Landfill

- According to the facility representatives, the nine (9) former disposal cells were constructed and used prior to 2001 and are unlined but have been capped (liner with clay top), vegetated and equipped with a leachate collection system and surface water run-on and run-off controls. See Photo 1. The disposal cells appeared maintained and in good condition.

- The facility manifests all transfers of hazardous wastewater treatment plant sludge to the Goff Mountain Landfill. Inspectors Dodd and Ancion reviewed selected manifests for disposal of wastewater treatment plant sludge from the facility in the Goff Mountain Landfill. No concerns were noted.

- The facility appears to conduct and document daily, weekly and semi-annual inspections of the Goff Mountain Landfill which include but is not limited to the leachate collection system, surface water run-on and run-off controls, condition of the active cells, security of the landfill and post closure inspections of the closed cells. Inspectors Dodd and Ancion reviewed selected inspection records. No concerns were noted.

Permitted Container Storage Area

- The permitted container storage area is located near the facility's waste water treatment plant. The storage area is a fenced, concrete floored, roofed structure with three (3) curbed storage bays which is permitted for storage of up to 13,200 gallons of hazardous waste. See photo 2. No containers of waste were present in the storage area at the time of the inspection.

- The facility appears to conduct and document weekly inspections of the permitted container storage area as required by the permit. Inspectors Dodd and Ancion reviewed selected inspection records for the permitted container storage area. No concerns were noted.

Wastewater Treatment Plant

- Inspectors observed the location of the former biomass basins which were a part of the facility's waste water treatment system. See photo 3. According to facility representatives, the biomass basins were closed in August 1994 (Biobasin #3) and December 1997 (Biobasins #1 and #2). The basins were dewatered and the remaining sludges were fixed in place and the basins backfilled with fly ash and capped with a liner and soil. See Attachment 7 for a description of the current WWTP at the facility.

- The facility utilizes three (3) secondary clarifiers at the wastewater treatment plant. The clarifiers are sub grade concrete lined structures used for treatment of the facility's waste water before discharge to the Kanawha River under the facility's NPDES permit (WV0000086). One of the clarifiers was temporarily out of service for maintenance. Photo 4 shows the concrete sub grade construction of the clarifier.

- Inspectors observed the former pH trim tank which was part of the facility's waste water treatment system. The tank is a sub grade concrete lined structure. See photo 5. According to facility representatives, the trim tank is no longer used. Wastewater only passes through the structure from the treatment system's aeration tanks to an equalization sump.

- Inspectors observed the equalization sump to the facility's waste water treatment system. The tank is a sub grade concrete/epoxy coated structure. See photo 6. According to facility representatives, the equalization sump was recently re-lined with an epoxy coating and was currently out of service at the time of the inspection.

- Inspectors observed the wastewater treatment system's sludge filter press. The filter press removes the F039 hazardous waste solids from the WWTP system. The sludge is dropped from the filter press into a dump trailer which is located beneath the filter press system. According to the facility representative, approximately 1-2 dump trailer loads of hazardous WWTP sludge is generated daily depending on loading. The waste is manifested on a per dump trailer basis and is transported to the Goff Mountain Landfill for disposal. The trailer was labeled as "Hazardous Waste Hauling". A DOT placard was present on the trailer as well as transporter ID number.

No. 1 Steam Plant

- Inspectors observed the 90-day hazardous waste storage area for this area of the facility. No containers of hazardous waste were present at the time of the inspection.

- Inspectors observed permitted hazardous waste tanks 1021, 1043 and 1044. See photos 7 and 8. Each tank was located within secondary containment and labeled as containing hazardous waste. Tanks 1043 and 1044 were out of service at the time of the inspection for required internal inspection. Also present within secondary containment for tanks 1043 and 1044 were nine (9) 55-gallon drums of hazardous waste for materials generated during inspection of the tanks. All drums were closed, labeled as containing hazardous waste and dated < 90 days. See photo 9.

- Inspectors observed 55-gallon drums utilized as satellite hazardous waste accumulation containers at the hazardous waste unloading station and adjacent to the control panel for BIF#3. The drums were closed and labeled as containing hazardous waste.

- Inspectors observed BIFs #3 and #4 in this area of the facility. These two BIFs are permitted for burning of hazardous waste for energy recovery. BIF #4 was shut down for maintenance at the time of the inspection.

- Inspectors observed sixty-eight (68) 55-gallon drums of hazardous waste fly-ash from the permitted BIF units. See photo 10. Each drum was closed, labeled as hazardous waste and dated < 90 days except one (1) drum was found to be unlabeled and accumulation start dates could not be read on three (3) other drums. Facility representatives immediately applied a dated hazardous waste label on the unlabeled drum and marked accumulation start dates on the labels for the other three drums. Facility representatives indicated that a recent rain and wind event at the facility may have caused the label to fall off the drum or accumulation start date to become illegible.

- Two (2) sumps for collection of process area wastewater were observed in the center process and west end of this area. The waste water collected in these sumps is ultimately conveyed to the wastewater treatment plant. According to the facility representatives, the sumps are sub-grade concrete structures with acid lined bricks.

- Inspectors observed eleven (11) 55-gallon drums located in the "west end dump pad". See photos 11, 12, 13 and 14. Six (6) drums were unlabeled and undated, one (1) drum was labeled as containing used oil and dated 8/17/10 and four (4) drums were labeled as hazardous waste and were dated 1/6/11. Facility representatives were uncertain as to the contents of the drums. The facility representatives subsequently determined later in the day that five (5) of the drums contained hazardous waste fly-ash from the permitted BIFs and the other six (6) drums contained waste oil. The facility representatives stated that the drums had

been labeled and dated as appropriate and were scheduled for off-site shipment for disposal the following day.

Sevin Unit

- Inspectors observed permitted hazardous waste tank 4623. See photo 15. The tank was located within secondary containment and was labeled as containing hazardous waste. Waste from this tank is transferred via tanker truck to permitted Tank 1023 for subsequent energy recovery in the facility's permitted BIF units.

- Inspectors observed the Station 710 drum storage area in this part of the facility. No containers of hazardous waste were present. Four (4) 55-gallon drums of waste oil were present. See photo 16. One (1) of the drums was not labeled as containing waste oil.

- Seven (7) <90 day hazardous waste storage tanks (4556, 4553, 4554, 4543, 4544 4504 and 4505) are present in this area of the facility. See photos 17, 18, 19 20 and 21. Each tank was located within secondary containment and labeled as containing hazardous waste, except tanks 4553 and 4554 were not labeled as hazardous waste, but were out of service for maintenance.

MCB

- Inspectors observed three (3) different 55-gallon drums utilized as satellite hazardous waste accumulation containers in different locations in this area of the facility. The drums were closed and labeled as containing hazardous waste. See photos 22, 23 and 24.

Larvin Unit

- A storage area for used oil and other containers of waste materials and product were observed in this area of the facility. See photo 25. Some of the containers were labeled as to contents, e.g., used oil. However, inspectors observed three (3) 55-gallon drums as well as other 5-gallon containers unlabeled as to contents.

- Inspectors observed <90 day hazardous waste storage tank 1885 in this area of the facility. See photo 26. The tank was located within secondary containment and was labeled as containing hazardous waste.

- Five (5) 55-gallon drums of hazardous waste and three (3) drums of non-hazardous waste were present in the Larvin warehouse < 90 day storage area. See photo 27. Each container was closed, labeled as containing hazardous waste, as appropriate and dated < 90 days.

- Eight (8) drums of hazardous waste were present in the FMC warehouse < 90 day storage area. See photo 28. Each container was closed, labeled as containing hazardous waste and dated < 90 days.

- Nine (9) drums of used oil were present in the FMC warehouse used oil storage area. See photo 29. Used oil labels were observed on six (6) of the drums. However labels on the other three (3) drums were not observed.

Upon completing inspection of the aforementioned areas, a brief closing conference with facility representatives was held to make arrangements to continue the inspection the following day.

Inspection Observations – March 2, 2011

Larvin Unit

- Inspectors observed <90 day hazardous waste storage tank 1885 in this area of the facility. See photo 30. The tank was located within secondary containment and was labeled as containing hazardous waste.

Universal Waste Storage Shed

- Inspectors observed the storage area for universal waste lamps and batteries generated at the facility. See photos 31 and 32. All containers of waste bulbs and waste batteries were labeled as appropriate and dated < 1 year.

Building 325

- Inspectors observed one (1) 55-gallon drum utilized as a satellite hazardous waste accumulation container for accumulation of paint related wastes. The drum was closed and labeled as containing hazardous waste. See photo 33. The drum was full to capacity. Inspectors noted several smaller open top containers with paint related materials were present in the area. Facility representatives indicated that the full drum would be dated and taken to a < 90 day storage area and a new satellite hazardous waste accumulation container would be put into service.

Building 52

- Inspectors observed one (1) 55-gallon drum utilized as a satellite hazardous waste accumulation container for accumulation of waste aerosol cans. The drum was closed and labeled as containing hazardous waste. See photo 34.

Building 3

- Inspectors observed one (1) 55-gallon drum utilized as a satellite hazardous waste accumulation container for accumulation of waste aerosol cans. The drum was closed and labeled as containing hazardous waste. See photo 35.

- Inspectors observed four (4) used oil drums in this area of the facility. The drums were closed and labeled as used oil.

Building 70

- Four (4) containers of hazardous waste were present in the < 90 storage area for this area of the facility. See photo 36. Each container was closed, labeled as containing hazardous waste and dated < 90 days.

Dow/Union Carbide Corporation (UCC) Operational Units

- Inspectors Dodd and Ancion met with Dow/UCC representatives Andy Altman, Janet Lawson, Cindy Elkins and Chuck Staley to tour hazardous waste generation and storage areas located within Dow/UCC operational units at the facility.

- As a tenant of the Bayer CropScience facility, any hazardous waste generated by Dow/UCC at this facility is managed under Bayer CropScience's RCRA Generator identification number. Dow/UCC maintains its own hazardous waste management program at the facility, i.e., Dow/UCC makes waste determinations on waste stream generated by their operations at the facility, generates, signs and maintains hazardous waste manifests for off-site disposal of hazardous waste, maintains personnel training records for personnel managing hazardous waste at the facility, maintains a preparedness and prevention program in conjunction with Bayer CropScience's facility preparedness and prevention program, has prepared a contingency plan, accumulates and stores hazardous waste in designated containers, tanks and operates and inspects hazardous waste storage containers, tanks and hazardous waste storage areas and submits a biennial report of their waste generated at the facility.

- Inspectors observed <90 day hazardous waste storage tanks 1405 and 1406 located in the Glycol Recovery area of Dow/UCC's operational unit at the facility. Each tank was labeled as hazardous waste and was located within secondary containment.

- Inspectors observed one (1) 55-gallon drum utilized as a satellite hazardous waste accumulation container near Building 161. The drum was closed and labeled as containing hazardous waste.

- Inspectors observed <90 day hazardous waste storage tank 1016 and an "acetone oil pot" located in the Acetone/Polyol area of Dow/UCC's operational unit at the facility. Each tank was labeled as hazardous waste and was located within secondary containment.

- Inspectors observed Dow/UCC's <90 day hazardous waste container storage area. The storage area is a curbed, concrete floored and roofed structure. A total of nineteen (19) containers of hazardous waste and five (5) containers of universal waste were present in the storage area. All containers were closed and labeled as hazardous or universal waste as appropriate. All containers were dated except one drum of hazardous waste. Facility representatives immediately marked the accumulation start date on the container.

- Inspectors observed <90 day hazardous waste storage tank 4998 located in the Polyox area of Dow/UCC's operational unit at the facility. The tank was labeled as hazardous waste and was located within secondary containment. A satellite hazardous waste accumulation container and universal waste accumulation container were also observed in this area of the facility. Each container was closed and labeled as appropriate.

Upon completion of the facility tour, EPA Inspector Dodd and WVDEP Inspector Ancion acquired additional information from the facility representatives via interviews and reviewed requested documentation. Copies of several documents were requested by the inspectors which were provided by the facility. Upon completing review of requested documentation at the facility, a closing conference was held between the inspectors and facility representatives. Areas of concern noted during the inspection were briefly discussed with the facility representatives.

Inspection logs

The facility conducts and documents inspections of various areas of the facility including the RCRA permitted hazardous waste storage areas, RCRA permitted storage tanks, permitted hazardous waste landfill and < 90 day storage areas. Selected inspection logs were reviewed during the inspection. Inspectors noted that the facility was unable to locate the inspection record for permitted Tank1010 for a one week period (week of 12/6/10). Inspection records for Tank 1020 for both the week before and after the date noted above were present in the facility's files.

Manifests

Selected hazardous waste manifests and land disposal restriction (LDR) forms for calendar years 2008 and 2010 were reviewed as part of the inspection, including manifests generated by the facility for transportation of waste water treatment plant sludge to the facility's permitted hazardous waste landfill, off-site shipments of hazardous waste for disposal and one manifest for waste received at the facility which was burned for energy recovery in the permitted BIF units at the facility. In addition, Inspectors reviewed selected hazardous waste manifests and

LDR forms generated by Dow/UCC for hazardous waste generated at the Bayer CropScience Institute, WV facility. Copies of selected hazardous waste manifests obtained during the inspection are included as Attachment 8. No significant concerns were noted.

Training

The facility provided job titles, written job descriptions and description of the type, amount and training personnel are required to have in handling of hazardous waste at the facility. All personnel receive initial training upon hiring and also undergo on the job training under supervision. The facility utilizes a computer based training and tracking system to provide personnel with required training. Each employee's training program is specific according to the job function(s) each employee is required to perform. Examples of employee's training records were provided for several employees who routinely handle and/or manage hazardous waste at the facility. No concerns were noted.

Preparedness and Prevention Program

The facility maintains a preparedness and prevention program which includes internal/ external communications via a PA system, telephones and two-way radios. The facility also has fire control systems such as a facility wide fire alarm system, sprinkler systems, fire extinguishers, and spill control and decontamination equipment. The facility has an internal fire water system which utilizes the Kanawha River as its source. The facility maintains an on-site fire department and hazardous materials response team. General facility housekeeping and organization was observed throughout the facility allowing unobstructed access to hazardous waste storage areas in case of an emergency. Local authorities have been familiarized with the nature of hazards present at the facility through coordination with the local fire and police departments as well as hosting coordinated emergency response drills at the facility with local emergency responders. The facility is also a member of a local mutual aid organization (Kanawha/Putnam Emergency Planning Committee) which provides assistance to its member organizations in case of emergency. No concerns were noted.

Contingency Plan

The facility has documented procedures in place which describe actions to be taken in case of emergency. The contingency plan is incorporated in the facility's RCRA permit as Attachment 4. The facility also maintains and updated emergency response manual which describes actions to be taken in case of an emergency, initiation of emergency response procedures, emergency coordinators, communication/notification system and evacuation plans for facility personnel. The emergency response manual includes a list of emergency coordinators along with their name and contact information. A description of emergency equipment is also included in the contingency plan. No concerns were noted.

Waste Analysis Plan

As required by 40 CFR 265.13(b), the facility has developed a waste analysis plan ("WAP") which describes the procedures for characterization of waste streams stored on-site. The WAP is incorporated in the facility's RCRA permit as Attachment 1. The WAP specifies the wastes to be sampled, analytical parameters, test and sampling methods and sampling frequency. The results of the facility's waste analysis plan results for 2010 were reviewed during the inspection. No concerns were noted.

Closure/Post-Closure/Financial Assurance

Bayer CropScience has developed closure plans for each RCRA permitted unit which is included in the facility's RCRA permit. The facility anticipates clean closure of all RCRA permitted units except for the permitted hazardous waste landfill (Goff Mountain Landfill). A post closure plan has been developed for the Goff Mountain Landfill and is included in Attachment 5 of the facility's RCRA permit. A post closure plan for the former waste water treatment plant surface units (Biobasins #1, #2 and #3) which were closed in 1994 and 1997 is also a part of the facility's RCRA permit. Bayer CropScience submits annual updates of closure and post closure cost estimates and financial assurance statements to WVDEP as required by the RCRA permit. Financial assurance is provided through a letter of credit as specified in 40 CFR Subpart H Part 265. The most recent letter of credit has sufficient resources for liability coverage, closure and post closure care. See Attachment 9. The most recent closure cost estimate is included in Attachment 10 to this report. No concerns were noted.

Air Emission Standards

Bayer CropScience has no process vents which manage hazardous waste greater than 10 ppm organics which are regulated under RCRA Subpart AA. However, the facility is subject to air emission standards specified in Subparts BB and CC of RCRA. The facility implements a regular daily, monthly and quarterly leak detection and repair inspection program. The facility provided the most recent air emission inspection report for monitoring of fugitive emissions documenting the facility's compliance with RCRA Subpart BB. See Attachment 11. The facility also conducts regular visual inspections of permitted above ground storage tanks (1021, 1043, 1044 and 4623) under Subpart BB and CC which are documented and kept on-file.

Bayer CropScience also utilizes Level 1 containers (120-gallon drums and smaller) to manage hazardous waste containing greater than 500 ppm volatile organics by weight. The Level 1 containers meet DOT standards and utilize covers with no visible gaps. Facility representatives also indicated that tanks storing hazardous waste at the facility meet Subpart CC Level 1 controls.

Groundwater Monitoring

The facility conducts groundwater monitoring to monitor groundwater at the permitted hazardous waste landfill (Goff Mountain Landfill). The groundwater monitoring program is specified in Module VII of the facility's RCRA permit. The groundwater monitoring program includes the sampling of groundwater from two (2) aquifers beneath the site and includes a background (up gradient) and at least three (3) monitoring wells down gradient of the landfill. Module VII of the RCRA permit specifies quarterly sampling and statistical analysis of the results, parameters of interest, sampling plan, sample collection procedures and required analytical procedures. The 2010 4th quarter groundwater monitoring report was reviewed during the inspection.

Biennial Report

The 2009 Biennial Report submitted to WVDEP by Bayer CropScience and Dow/UCC on March 12, 2010 was reviewed during the inspection. A copy of the 2009 Biennial Report is included as Attachment No. 12 to this report.

Waste Water Treatment Plant System/Surface Impoundments

As part of the inspection, EPA Inspector Dodd observed the facility's waste water treatment plant system for the presence of potentially RCRA regulated surface impoundments. Based on visual inspection of the facility's waste water treatment plant system, all components of the waste water treatment plant system were either above ground storage tanks or sub grade concrete or concrete epoxy lined structures and as such were determined to be tanks rather than surface impoundments and were not further evaluated as potential RCRA regulated surface impoundments. See observations made on March 1, 2011 noted above for the waste water treatment plant.

Attachments

1. EPA TSD Facility Inspection Checklist
2. Location Map
3. Hazardous Waste Permit WVD005005509
4. Miscellaneous Treatment Unit Closure Cover Letter
5. 2010 SARA 311 Hazardous Chemical Report
6. Summary of Permitted and < 90 Hazardous Waste Storage Tanks/Areas
7. Wastewater Treatment Plant Description
8. Manifests
9. Financial Assurance
10. Closure Cost Estimate
11. Subpart BB Monitoring Results Summary, July 2010 through December 2010
12. 2009 Biennial Report
13. Photos

Attachment 1
EPA TSD Facility Inspection Checklist

April 15, 2011

EPA TSD FACILITY CHECKLIST

Name of Facility: Bayer CropScience

Address of Facility: Route 25 @ I-64
Institute, WV 25112

EPA I.D. Number: WVD 005005509

Name/Title of Facility Representative: Lennie Scott, Env. Mgr. & Regulatory
Ray Stuart, Env. Compliance & Support
Unit Environmental Staff handle day to day handling of hazardous waste.

I. General

1. Does the facility generate hazardous waste? (yes) no

(if yes, complete generator checklist)

2. Does the facility manage (i.e. treat, store or dispose) any hazardous waste that is:

a. generated on-site? (yes) no

b. generated off-site at facility(s) having different ownership? yes (no)

c. generated off-site by facility(s) having common ownership? (yes) no Permit allows for acceptance of waste stream from Bayer Plant in Michigan.

If b. or c. are yes, list (or attach) the names and addresses of the facility(s) which transport its waste to the subject TSD:

Bayer, Muskegon, MI Jan 2010

3. Does the facility perform the following on-site:

a. storage of hazardous waste? (yes) no

accepted 2 waste haulers waste from offsite user facility Jan 2010.

b. treatment of hazardous waste? (yes) no

c. disposal of hazardous waste? (yes) no

4. Is the facility subject to any exclusions for its hazardous waste? yes (no)

If yes, list the waste and the basis for exclusion:

5. Does the facility contemplate any changes in its operation insofar as the management of hazardous waste is concerned? yes no Possibly.

If yes, describe: Potentially consider closure of BIFs. Shutdown of potential production units may decrease volume & waste streams.

6. Does the facility transport hazardous waste off-site for further management? (yes) no

If yes, list (or attach) the names and addresses of the facility(s) to which such waste is shipped and answer the questions pertaining to manifests and pre-transport requirements on the generator checklist and attach to this checklist. See Biennial Report

7. Has the facility submitted:

a. Part A permit application? (yes) no

If yes, approximately when? early 1980's.

b. Part B permit application? (yes) no

If yes, approximately when? 1999 (Current Permit Application Pending 10/3/03 → 9/29/13.

II. General Facility Standards

265.13(a)(1)

1. Has the facility obtained a detailed chemical and physical analysis of a representative sample of each waste it receives prior to its treatment, storage or disposal? (yes) no

265.13(a)(3)
2. Is the analysis repeated as necessary to ensure that it is accurate and up to date? (yes) no

265.13(a)(4)
3. If the facility receives off-site shipments of hazardous waste, does it adequately inspect and, if necessary analyze each shipment to determine whether it matches the identity specified on the accompanying manifest? yes no (N/A)

If no, explain: _____

_____

_____

_____

265.13(b)
4. Has the facility developed a written waste analysis plan and, if so, is the plan kept at the facility? (yes) no

If no, explain: _____

_____

_____

If yes, does the waste analysis plan contain the following:

a. List of wastes to be sampled? (yes) no

b. Location of sampling? (yes) no

265.13(b)(1)
c. List of parameters and why they were selected? (yes) no

265.13(b)(2)
d. Test methods? (yes) no

265.13(b)(3)
e. Sampling method to ensure collection of a representative sample? (yes) no

265.13(b)(4)
f. Frequency of sampling? (yes) no

265.13(b)(5)
g. Waste analyses that off-site generators have agreed to supply? yes no (N/A)

265.13(b)(6)

h. Additional waste analysis requirements associated with specific waste management methods? yes no (N/A)

265.13(b)(6) & 268.7
i. Required updates for LDR (see LDR checklists for more details)? yes no

261.24
j. Replacement of EP Tox with TCLP? (yes) no N/A

265.13(b)(7)
k. The testing of contents/residues from LDR exempted surface impoundments (268.4(a)) and the procedures for the annual removal of those residues which do not meet applicable treatment standards? yes no (N/A)

265.13(c)
l. Procedures that will be used by off-site facilities to inspect and, if necessary, sample and analyze each shipment of hazardous waste to ensure that it matches its identity on the accompanying manifest?
yes no (N/A)

The inspector should obtain a copy of the waste analysis plan if any problems are found.

265.13(b)
5. Does it appear that the facility follows its waste analysis plan? yes no

If no, describe: Waste Analysis Plan included as Attachment 1 to Permit. Facility provided results of WAP analysis for 2010.

265.14(b)(1)
6. Does the facility have a 24 hour surveillance system which continually monitors and controls entry to the active portion of the facility? (yes) no

If no:

265.14(b)(2)(i)
a. Does the facility have an artificial or natural boundary which completely surrounds the active portion of the facility? (yes) no

265.14(b)(2)(II)
b. Does the facility have a means to control entry at all times, i.e., attendents, locked entrances, gates,

television monitors, controlled roadway access, etc.
yes no

265.14(c)
7. Does the facility have a restricted access sign posted at each entrance to the active portion of the facility, i.e., "Danger - Unauthorized Personnel Keep Out"? yes no

265.15(b)(1) & (2)
8. Does the facility have a written inspection schedule and, if so, is it kept at the facility? yes no

If no, describe: Inspection schedules specified in Permit Attachment 2.

If yes, does it address inspecting:

265.15(b)(1)
a. Monitoring equipment? yes no

b. Safety and emergency equipment? yes no

c. Security devices? yes no

d. Operating and structural equipment? yes no

265.15(b)(4)
e. Loading/unloading areas when in use or other areas subject to spills? yes no

265.15(b)(3)
9. Does the inspection schedule identify the types of problems which are to be looked for during the inspection?
yes no

265.15(d)
10. Does the facility record inspection observations in an inspection log? yes no

If yes, does the log include:

a. Date and time of inspection? yes no

b. Name of the inspector? yes no

c. Notation of observations? yes no

d. Date and nature of any repairs or remedial actions?
yes no

The inspector should obtain copies of the inspection schedule

or the inspection logs if any problems are found.

11. Are the inspection records kept for at least 3 years from the date of the inspection? (yes) no

265,15(c)
12. Are there any malfunctions, deficiencies or equipment deterioration problems uncovered during a prior inspection that the facility has failed to correct? yes no

If yes, describe: None observed.

13. Does the facility maintain personnel training records?
(yes) no

If yes, do these records include:

265.16(d)(1)
a. Job title for each position related to hazardous waste management and the employee filling each job?
(yes) no

265.16(d)(2)
b. A written job description for each position?
(yes) no

265.16(d)(3)
c. A written description of the type and amount of training that will be given to each person? (yes) no

265.16(d)(4)
d. Records that document that the training or job experience required by facility personnel to effectively respond to emergencies and otherwise manage hazardous waste in a proper manner has been successfully completed?
(yes) no

265.16(b)
14. Have facility personnel successfully completed the required training or job experience within six months after occupying the position? (yes) no

265.16(c)
15. Do facility personnel take part in an annual review of the initial training requirements and update them as necessary?
(yes) no

Answer the following questions if the facility manages either

ignitable or reactive waste.

265.17(a)
16. Are ignitable or reactive wastes separated and protected from sources of ignition or reaction? (yes) no

17. Are there "No Smoking" signs posted wherever a hazard from ignitable or reactive waste exists? (yes) no

265.17(b)
18. Are ignitable or reactive wastes managed in what appears to be a safe manner (i.e. no generation of extreme heat, pressure, fire or explosion, violent reactions, toxic fumes, etc. or damage to devices holding such wastes)? (yes) no

If no, describe: _____

_____

_____

Answer the following question if the facility manages incompatible wastes.

265.17(b)
19. Is the mixture or commingling of incompatible wastes, or incompatible wastes and materials conducted in a safe manner? yes no (NA)

If no, describe: Not applicable

_____

_____

III. Preparedness and Prevention

1. Does the facility have the following equipment:

265.32(a)
a. Internal communications or alarm system? (yes) no
Pull boxes for fire/spills, PA system
265.32(b)
b. Telephone or hand-held two-way radio? (yes) no

265.32(c)
c. Portable fire extinguishers or other fire control equipment, spill control equipment and decontamination equipment? (yes) no On-site FD. Haz Mat Response Truck

265.32(d)
d. Adequate volume of water? (yes) no

265.33 Kanawha River ⇒ Hydrant System city water

2. Does the facility test and maintain the above equipment to assure its proper operation? (yes) no

265.35

3. Is there sufficient aisle space to allow the unobstructed movement of personnel and equipment to areas where hazardous waste are located in the event of an emergency? (yes) no

265.37(a)(1)

4. Has the facility made arrangements with local authorities to familiarize them with the layout of the facility and the nature/hazards of the hazardous waste handled at the facility?
(yes) no KPEPC coordinate - provide info on regular basis. On-Site visits

IV. Contingency Plan

265.51(a) & 265.53(a)

1. Has the facility prepared a contingency plan and is it maintained at the facility? (yes) no Emergency Response Manual

If yes, does it contain the following:

265.52(a)

a. Description of the actions that are to be taken in case of an emergency (all potential types of emergencies should be identified)? (yes) no

265.52(c)

b. Description of arrangements made with local authorities? (yes) no

265.52(d)

c. Current list of emergency coordinators' names, addresses and phone numbers (office and home)?
(yes) no

265.52(e)

d. List of all emergency equipment at the facility, including locations, descriptions and relevant capabilities? (yes) no

265.52(f)

e. evacuation plan for facility personnel? (yes) no

The inspector should obtain a copy of the facility's contingency plan if any problems are found.

265.53(b)

2. Were copies of the contingency plan submitted to local authorities that may provide emergency services? (yes) no

3. Has the facility's contingency plan ever failed in an emergency? yes (no)

If yes: Facility does review and critique impact incident analysis.

265.54(b)
a. Was the contingency plan immediately amended?
yes no NA

265.56(j)
4. If the contingency plan is implemented, does the facility record the incident in its operating log and submit a written report of the incident to the appropriate state agency?
(yes) no N/A

V. Manifest System, Recordkeeping and Reporting

reviewed manifest also from STP → GNL attached OK. OK reviewed 10 Manifests offsite shipments of waste, problems Ltd.

Answer the following questions if the facility receives hazardous waste from off-site. 1 SHIPMENT OF LIQUID WASTE Received from Bayer Facility for energy recovery in BIFS

265.71(a)(1)
1. Does the facility sign and date each copy of the manifest accompanying a hazardous waste shipment? (yes) no

265.71(a)(2)
2. Does the facility note any significant discrepancies in the manifest (significant discrepancies in quantity are variations greater than 10 % for bulk waste or any variation in piece count for batch waste)? yes no NA

265.71(a)(4)
3. Does the facility send a copy of the manifest back to the generator within 30 days after the waste was received?
(yes) no

265.71(a)(5)
4. Does the facility retain a copy of the manifest for at least 3 years? (yes) no

265.72(b)
5. Does the facility attempt to reconcile any significant discrepancies in the manifest when they are discovered?
yes no (N/A)

6. If the discrepancy is not resolved within 15 days after receiving the waste, does the facility notify the Regional Administrator in writing? yes no (N/A)

265.73(a)
7. Does the facility keep a written operating record?
(yes) no

If yes, does it contain the following:

265.73(b)(1)
a. Description and quantity of each hazardous waste

received? yes no

b. Method(s) and date(s) of treatment, storage or disposal? yes no

265.73(b)(2)
c. Location of each hazardous waste within the facility and the quantity at each location? yes no

265.73(b)(3)
d. Records and results of waste analysis? yes no

265.73(b)(4)
e. Details of all incidents that require implementing the contingency plan? yes no N/A

265.73(b)(5)
f. Records and results of inspections? yes no

265.73(b)(6)
g. Monitoring, testing or analytical data? yes no

265.73(b)(7)
h. Closure/post-closure cost estimates?
yes no N/A

265.73(b)(8)
i. Records of quantities and dates of placement of hazardous waste into land disposal units?
yes no N/A

265.73(b)(9) - (14)
j. Copies of notifications, certifications and demonstrations, if applicable, required by the LDR program? yes no N/A

265.75
8. Does the facility prepare, and submit to the Regional Administrator by March 1 of each even numbered year, a biennial report? yes no

If yes, does it contain the following:

265.75(a)
a. EPA I.D. number, name and address of the facility?
yes no

265.75(b)
b. Calender year covered by the report? yes no

265.75(c)
c. EPA I.D. number of each generator from which the facility received a hazardous waste shipment during the year? yes no N/A

265.75(d)
d. Description and the quantity of each hazardous waste received during the year (for off-site facilities, this information must be listed by EPA I.D. number of each generator)? yes no NA

265.75(e)
e. Method of treatment, storage or disposal of each hazardous waste? (yes) no

265.75(f)
f. Groundwater monitoring data? yes no (N/A)

265.75(g)
g. Most recent closure/post-closure cost estimates? yes no (N/A)

265.76
9. Has the facility received any hazardous waste from an off-site generator without an accompanying manifest? yes (no)

If yes:

a. Did the facility prepare and submit to the Regional Administrator, within 15 days after receiving the waste, an unmanifested waste report? yes no NA

VI. Ground Water Monitoring

Answer the following questions if the facility manages hazardous waste in a land disposal unit.

265.90(a)
1. Has the facility installed a groundwater monitoring system? (yes) no

If no, describe why: Goff Mountain Landfill
Two aquifers (upper & lower). Each aquifer has background well and 3 or more down gradient sampling wells.

If yes, answer the following:

2. Is the facility presently conducting (a) detection phase groundwater monitoring or (b) assessment phase groundwater monitoring (circle appropriate one)?

265.91(a)(1)
3. Is there at least one monitoring well installed hydraulically upgradient of the waste management area?

yes no

265.91(a)(2)
4. Is there at least three monitoring wells installed hydraulically downgradient of the waste management area?
yes no

265.91(a)(2)
5. Do monitoring wells intercept the water within the uppermost aquifer underlying the facility?
yes no unsure

265.91(c)
6. Are all monitoring wells cased, screened, packed or sealed in a manner that enables uncontaminated and representative samples to be collected from the uppermost aquifer?
yes no unsure

If no, explain: _____

_____

_____

_____

265.92(a)
7. Has the facility developed a ground water sampling and analysis plan and is the plan kept at the facility?
yes no

If no, explain: Permit Module VII

_____

_____

_____

If yes, does it include procedures and techniques for:

265.92(a)(1)
a. Sample collection? yes no

265.92(a)(2)
b. Sample preservation and shipment? yes no

265.92(a)(3)
c. Analytical procedures? yes no

265.92(a)(4)
d. Chain of custody control? yes no

265.92(a)

8. Does the facility appear to follow its sampling and analysis plan? (yes) no

If no, explain: _____

Letter to provide copy of last quarters results.
Reviewed last qtr GW monitoring report - 4th Qtr 2010.
TOC elevated in upgrad. monitor - similar results in past. Issues associated but not related to natural affect.

9. Does the facility's ground water monitoring program include:

Quarterly Analysis → Trend Evaluation conducts analysis of data → Submitted to WRQCB. Limit specified certain sampling w upper/lower organics

265.92(b)(1)
a. Measuring concentrations of "ground water suitability" parameters quarterly during the first year for each well? yes no NA

265.92(b)(2) & (d)(1)
b. Measuring concentrations of "ground water quality" parameters quarterly during the first year and at least annually afterwards for each well? yes no NA

265.92(b)(3) & (c)(2) & (d)(2)
c. Measuring concentrations (at least four replicate samples) of "indicators of ground water contamination" parameters quarterly during the first year and at least semi-annually afterwards for each well? yes no NA

265.92(e)
d. Determining elevation of the ground water surface at each monitoring well each time a sample is collected? (yes) no

265.93(a)
10. Has the facility prepared an outline of a groundwater quality assessment program? (yes) no N/A Contained in permit

11. Has the facility's ground water monitoring program been certified by a qualified geologist, hydrologist, or geotechnical engineer? (yes) no Approved in permit

VII. Closure/Post-Closure/Financial Assurance

265.112(a)
1. Does the facility have a written closure plan?
(yes) no

If yes, answer the following:

a. Has the plan been approved by the State or EPA?
(yes) no Permit

265.112(c)
b. Has the closure plan been amended as necessary in order to keep it up-to-date? yes no

265.142(a)
c. Is there a detailed and up-to-date written estimate of closure cost? yes no

265.142(d)
d. Is the latest closure cost estimate kept at the facility? yes no

265.118(a)
2. Does the facility have a written post-closure plan?
yes no N/A Coff Mtn Landfill & Bio Basins

If yes, answer the following:

a. Has the plan been approved by the State or EPA?
yes no

265.118(d)
b. Has the post-closure plan been amended as necessary in order to keep it up-to-date? yes no

265.144(a)
c. Is there a detailed and up-to-date written estimate of post-closure cost? yes no

265.144(d)
d. Is the latest post-closure cost estimate kept at the facility? yes no

265.143 & 265.145
3. Does the facility have a means to satisfy its financial assurance requirements? yes no

If yes:

a. What financial mechanisms are used?

letter of credit. Renewed 2010 Letter of credit.

b. Does the amount equal or exceed the estimated cost of closure (and post- closure if necessary)? yes no

- Facility performed closure of miscellaneous unit in 2004 and sent a copy of the closure report dated 1/25/05. Unit was steam cleaned & determined to require no further post closure care.

TSD Checklist for Containers:

VIII. Containers

265.171

1. Are container(s) in good condition? (Yes) No
   If no, explain:

2. Are container(s) made of or line with materials which will not react with or be incompatible with the wast they are storing? (Yes) No

265.173(a)

3. Are containers kept closed? (Yes) No

265.171

4. Are any container(s) leaking? Yes (No)
   If yes, describe:

265.174

5. Are container storage area(s) inspected at least ~~twice~~ weekly and is an adequate inspection record/log maintained? (Yes) No
   If no, explain:

6. Are container(s) holding ignitable or reactive waste located at least 15 meters (50 feet) from the facility's property line? (Yes) No N/A

7. Are incompatible wastes placed in the same container(s)? Yes (No)
   If yes, explain:

265.177(c)

8. Are container(s) holding incompatible hazardous waste properly separated or protected from one another while in storage? Yes No (N/A)
   If no, explain:

TSD Checklist for Storage Tanks:

IX. Tanks

1. Which of the following describes the tank(s) employed at this facility (highlight or circle appropriate response(s))?

a. Indoor - not on impermeable floor

b. Indoor - on impermeable floor

(c.) Outdoor - above ground

d. Outdoor - in ground

e. Outdoor - underground

265.191

2. Does the tank(s) appear to be in good condition? (Yes) No
If no, describe:

265.193

3. Is the tank(s) provided with an effective secondary containment system? (Yes) No
If yes, describe:

265.191(a)

4. If no, does the facility have a written assessment reviewed and certified by an independent, qualified, registered professional engineer that attests to the tank(s)'s structural integrity?
Yes No

265.191(b)

5. Was a leak test performed on the tank(s)? Yes No

265.194(b)

6. Is the tank(s) provided with adequate controls to prevent spills or overflows (i.e., automatic feed cutoff, bypass to another unit, high level alarms, etc.) (Yes) No audible high level alarms and control panel shut off

265.194(b)

7. Is there sufficient freeboard (2 feet) in ~~un~~covered tank(s) to prevent overtopping by wave or wind action or precipitation? Yes No (N/A)

265.195(a)
8. Is tank(s) inspected each operating day? Yes No

If yes, do inspections include:

265.195(a)(1)
a. Overfill/spill control equipment? Yes No monitored on screens in control room.

265.195(a)(2)
b. Above ground portions of the tank(s) for corrosion or releases? Yes No

265.195(a)(3)
c. Data gathered from monitoring equipment and leak detection equipment?
Yes No NA

265.195(a)(4)
d. Area immediately surrounding the externally accessible portion of the tank(s) and secondary containment system for signs of erosion and releases? Yes No

265.195(b)(4)
9. Does this facility perform annual inspections of the cathodic protection system, if present. Yes No N/A

265.195(c)
10. Does the facility properly document all of the results of its tank system inspections? Yes No

265.196
11. Is there any indication that the facility did not properly respond to spills or leaks from a tank(s) (this would include failure to stop the spill/leak, failure to clean up spilled/leaked material, failure to minimize migration, failure to remove tank(s) from service immediately, failure to provide notification, etc.)? Yes No
If yes, describe:

12. Does the facility store any ignitable or reactive waste in its tank(s). Yes No
If yes, describe:

265.198(a)(1)
a. Is the waste treated, rendered or mixed before or immediately after placement in the tank(s) so that it no longer meets the definition of ignitable or reactive waste? Yes No

265.198(a)(2)
b. Is the waste stored in such a way that it is protected from any material or condition that may cause the waste to ignite or react? Yes No

265.198(a)(3)

c. Is the tank(s) used solely for emergencies? Yes (No)

265.198(b)

d. Does the tank(s) appear to be a safe distance from the facility's property line and public thoroughfares? (Yes) No

If no, describe:

13. Is there any indication that incompatible wastes are being stored in a tank(s)? Yes (No)

If yes:

265.199(a)

a. Is there any evidence of extreme heat or pressure, fire or explosion, violent reactions or toxic emissions occurred? Yes (No)

If yes, describe:

265.200

14. Are waste analysis conducted or written documentation obtained before placing a substantially different hazardous waste into a tank(s)? Yes No Not applicable, but would be conducted if necessary

X. Surface Impoundments

265.221(a)

1. Is the facility's surface impoundment(s) equipped with two or more liners and a leachate collection system? yes no

If no, describe why: _____

_____

_____

_____

265.222(a)

2. Is there at least two feet of freeboard in the surface impoundment(s)? yes no

If no, how much freeboard is maintained and why: _____

_____

_____

_____

265.223

3. Do all earthen dikes have a protective cover such as grass, shale or rock to maintain structural integrity?
yes no N/A

4. If the facility chemically treats hazardous waste in its surface impoundment, does it:

265.225(a)(2)(i)

a. Conduct waste analyses and trial treatment tests?
yes no N/A

265.225(a)(2)(ii)

b. Have written, documented information on similar treatment of similar waste under similar operating conditions? yes no N/A

265.226(a)(1)

5. Does the facility inspect the freeboard level in its surface impoundment(s) at least once each operating day?
yes no

265.226(a)(2)

6. Does the facility inspect the surface impoundment(s), including dikes and vegetation surrounding the dike at least once each week? yes no

7. Does the facility have any surface impoundments which are not being used or not intended for future use? yes no

If yes:

265.228(a)(1)
a. Has all hazardous waste and hazardous waste residue been removed from the impoundment(s) or decontaminated? yes no

265.228(a)(2)
b. Was the impoundment(s) closed by removing liquid waste or solidifying the remaining waste/residues and covering it with a final cover? yes no

If yes, describe appearance of final cover: _____

_____

_____

_____

8. Are ignitable or reactive wastes placed in a surface impoundment? yes no

If yes:

265.229
a. Do the waste and impoundment(s) satisfy all applicable requirements of the LDR regulations (40 CFR Part 268)? yes no

265.229(a)
b. Are they treated, rendered or mixed before or immediately after placement in the impoundment so that they no longer meet the definition of ignitable or reactive waste? yes no

265.229(b)
c. Are they protected from possible ignition or reaction sources and certified as such by a qualified chemist? yes no

If yes, describe: _____

_____

_____

_____

265.229(c)
d. Is the impoundment(s) used solely for emergencies?

yes no

9. Are incompatible wastes placed in the same surface impoundment? yes no

If yes:

265.230

a. Is there any evidence that conditions of extreme heat or pressure, fire or explosion, violent reactions or toxic emissions occurred? yes no

If yes, describe: _____

_____

_____

_____

XI. Waste Piles

Note: A waste pile used as a disposal unit is a landfill and is subject to the landfill regulations. This section pertains to waste piles that are used strictly for waste storage or treatment.

265.254
1. Is the facility's waste pile(s) equipped with two liners and a leachate collection system? yes no

If no, describe why: _____

_____

_____

_____

265.251
2. Is the waste pile(s) covered or otherwise managed to control wind dispersal? yes no

265.252
3. Does the facility analyze a representative sample of waste from each incoming shipment before adding the waste to any existing pile? yes no N/A

4. Is the leachate or run-off from the pile(s) a hazardous waste? yes no

If yes:

265.253(a)(1)
a. Is the pile(s) on an impermeable base? yes no

265.253(a)(2)
b. Is there an adequately designed and operated run-on control system for the pile(s)? yes no

265.253(a)(3)
c. Is there an adequately designed and operated run-off management system? yes no

265.253(b)(1)
d. Is the pile(s) protected from precipitation and run-on by some other means? yes no

If yes, describe: _____

_____

_____

265.253(b)(2)
5. Are liquids or waste containing free liquids placed in the pile(s)? yes no

6. Are ignitable or reactive wastes placed in the pile(s)? yes no

If yes:

265.256(a)
a. Do the waste and pile(s) satisfy all applicable requirements of the LDR regulations (40 CFR Part 268)? yes no

If no, describe: _____

_____

_____

_____

265.256(a)(1)
b. Is the waste treated, rendered or mixed so it no longer meets the definition of ignitable or reactive? yes no

265.256(a)(2)
c. Is the waste protected from sources of ignition or reaction? yes no

7. Are incompatible wastes placed in the same waste pile? yes no

If yes:

265.257(a)
a. Is there any evidence that conditions of extreme heat or pressure, fire or explosion, violent reactions or toxic emissions occurred? yes no

If yes, describe: _____

_____

_____

_____

265.257(b)
8. Are waste piles adequately separated or protected from other hazardous waste management units that contain

incompatible waste? yes no N/A

265.257(c)

9. Have hazardous wastes been placed on the same area where incompatible wastes were previously piled without first providing sufficient decontamination? yes no

If yes, describe: _____

_____

_____

_____

10. Have any of the facility's waste piles undergone closure? yes no

265.258(a)

If yes, were all waste residues removed or decontaminated? yes no

265.258(b)

If no, was the area closed in accordance with the requirements applicable to landfills? yes no

If no, describe: _____

_____

_____

_____

XII. Land Treatment

Note: Hazardous waste must not be placed in a land treatment unit unless the waste can be made less hazardous or nonhazardous.

265.272(b)
1. Is there an adequately designed and operated run-on control system? yes no

If no, explain: _____

_____

_____

_____

265.272(c)
2. Is there an adequately designed and operated run-off management system which effectively collects all run-off from the land treatment unit? yes no

If no, explain: _____

_____

_____

_____

265.272(e)
3. Is wind dispersal effectively controlled within the land treatment unit? yes no

If no, describe: _____

_____

_____

_____

265.273(a)
4. Has the facility determined the concentrations in the waste of all constituents which exceed the maximum allowable and cause the waste to exhibit the Toxicity Characteristic before placing such hazardous waste in a land treatment unit?
yes no

265.273(b)
5. Has the facility determined the concentrations in any listed waste of any substance which caused the waste to be listed before placing such hazardous waste in a land treatment

unit? yes no N/A

6. Does the facility grow any food chain crops within the land treatment unit? yes no

If yes, answer the following questions:

265.273(c)
7. Has the facility determined the concentrations in the waste of arsenic, cadmium, lead and mercury before placing such hazardous waste in a land treatment unit? yes no

265.276(a)
8. Has the facility notified the Regional Administrator that food chain crops are being grown? yes no

265.276(b)(1) & (2)
9. Did the facility prepare the necessary demonstration that food chain crops will not experience any problems with arsenic, lead or mercury based on appropriate field testing? yes no

If yes, describe the information that was used for preparing this demonstration: _____

_____

_____

_____

10. Does the land treatment unit having food chain crops receive any waste that contains cadmium? yes no

If yes:

265.276(c)(1)(i)
a. Was the pH of the soil and waste mixture 6.5 or greater at the time of each waste application?
yes no

If no, did the waste contain cadmium concentrations of 2 mg/kg (dry weight) or less? yes no

265.276(c)(1)(ii)
b. Is the annual application rate of cadmium less than 0.5 kilograms/hectare on land used to produce tobacco, leafy vegetables or root crops grown for human consumption? yes no N/A

For other food chain crops, is the annual cadmium application rate less than or equal to 0.5 kilograms/hectare (beginning January 1, 1987)?
yes no

265.278(a)
11. Has the facility prepared in writing and implemented an unsaturated zone monitoring plan? yes no

If yes, does the plan include:

265.278(b)(1)
a. Soil monitoring? yes no

265.278(b)(2)
b. Soil-pore water monitoring? yes no

265.278(c)(1)
c. Sample depths below waste incorporation? yes no

265.278(c)(2)
d. Number of samples to be taken? yes no

265.278(c)(3)
e. Frequency and time of sampling? yes no

265.278(e)
f. Constituents to be analyzed (must be the same as those found in the waste during waste analysis efforts)?
yes no

12. Does the facility's implementation of its unsaturated zone monitoring plan yield the following:

265.278(a)(1)
a. Detection of the vertical migration of hazardous waste and hazardous waste constituents beneath the land treatment unit? yes no

If no, explain: _____

_____

_____

_____

265.278(a)(2)
b. Information on the background concentrations of the hazardous waste and hazardous waste constituents in similar but untreated soils nearby? yes no

If no, explain: _____

_____

_____

_____

265.279

13. Does the facility's operating record include hazardous waste application dates and rates? yes no

14. Have any of the facility's land treatment units undergone closure? yes no

If yes, were the following issues addressed:

265.280(c)(1)

a. Removal of contaminated soils? yes no

265.280(c)(2)

b. Placement of a final cover? yes no

265.280(d)(1)

c. Continuation of unsaturated zone monitoring? yes no

265.280(d)(2) & (3)

d. Maintenance of run-on control system and run-off management system? yes no

265.280(d)(4)

e. Control wind dispersal of particulates? yes no

15. Are ignitable or reactive wastes placed in a land treatment unit? yes no

If yes:

265.281

a. Do the waste and treatment zone meet all applicable requirements of the LDR regulations (40 CFR Part 268)? yes no

If no, describe: _____

_____

_____

_____

265.281(a)

b. Is the waste immediately incorporated into the soil so that it no longer meets the definition of ignitable or reactive? yes no

265.281(b)

c. Is the waste protected from any sources of ignition or reaction? yes no

16. Are incompatible wastes placed in the same land treatment

unit? yes no

If yes:

265.282

a. Is there any evidence that conditions of extreme heat or pressure, fire or explosion, violent reactions or toxic emissions occurred? yes no

If yes, describe: _____

_____

_____

_____

XIII. Landfills

265.301(a)
1. Is the facility's landfill(s) equipped with two liners and a leachate collection system? yes no

If no, describe why: Goff Mountain Landfill multiple units with landfill. Newer cells are 2 lined/leachate collection. Historical cells? Previous to 2001 LF cells are unlined, but capped (double liner with clay top). Existing cell & newer cells will be 2 lined. All cells have leachate collection system.

265.302(a)
2. Is there an adequately designed and operated run-on control system? (yes) no

265.302(b)
3. Is there an adequately designed and operated run-off management system? (yes) no leachate/runoff → tanks → WWTP.

265.302(d)
4. Is the landfill(s) covered or otherwise managed to control wind dispersal? (yes) no all covered except active portion

5. Does the facility maintain the following items in its operating record:

265.309(a)
a. On a map, the exact location and dimensions, including depth, of each cell? (yes) no

Get from Lennie

265.309(b)
b. The contents of each cell and the approximate location of each hazardous waste type within each cell? yes no Since 1990 - only F039 w/ WWTP sludge & non-hazardous detailed description of waste placed in historical cells is unknown.

6. Have any of the facility's landfills undergone closure? yes (no) Not to meet post closure requirement. Actively managing RCRA capped portions.

If yes, were the following issues addressed:

265.310(a) Specified in permit
a. Was the landfill or cell(s) covered with a final cover? (yes) no

265.310(a)(1)
b. Minimization of migration of liquids? (yes) no

265.310(a)(3) & (4)
c. Maintaining adequate drainage? (yes) no

d. Maintaining the cover's integrity? (yes) no

7. Are ignitable or reactive wastes placed in the landfill(s)?
yes (no) Not since 1990. Only WWTP sludge. Prior to 1990 all wastes from plant disposed of in landfill.

If yes:

265.312(a)
a. Do the waste and landfill(s) satisfy all applicable requirements of the LDR regulations (40 CFR Part 268)?
yes no

If no, describe: _____

_____

_____

_____

265.312(a)(1)
b. Is the waste treated, rendered or mixed so it no longer meets the definition of ignitable or reactive?
yes no

265.312(a)(2)
c. Is there any evidence that conditions of extreme heat or pressure, fire or explosion, violent reactions or toxic emissions occurred? yes no

If yes, describe: _____

_____

_____

_____

265.312(b)
d. Is the waste protected from sources of ignition or reaction? yes no

8. Are incompatible wastes placed in the same landfill cell?
yes (no)

If yes:

265.313
a. Is there any evidence that conditions of extreme heat or pressure, fire or explosion, violent reactions or toxic emissions occurred? yes no

If yes, describe: _____

① GML RCRA Inspection Daily/Weekly Logs OK

② Weekly Security Inspection Logs.

③ GML POSV-Closure Semi-Annual Inspection Logs.

- Check on Status of 6 Cells 1-9 (Post-Closure Reference) Gordon?
- Waste Manifests for Shipments of WWS Pond 9 to GML kept in EHS Administrative Office.

265.314(b)

9. Have any bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids been placed in a landfill since May 8, 1985? yes (no) Pre 1990? See notes above.

10. Have any containers holding free liquids been placed in a landfill since March 22, 1982? yes no ? Unknown prior to 1990

If yes:

265.314(c)(1)

a. Has all free-standing liquid been removed?
yes no

b. Has waste been mixed with absorbent or solidified so that free-standing liquid is no longer observed?
yes no

265.314(c)(2)

c. Was container(s) very small, such as an ampule?
yes no

265.314(c)(3)

d. Was container(s) designed to hold free liquids for use other than storage, such as a battery or capacitor?
yes no

265.314(c)(4)

e. Was the container(s) a lab pack? yes no

11. Have partially full or empty container(s) been placed in a landfill? yes (no) Unknown prior to 1990.

If yes:

265.315(b)

a. Were the container(s) crushed, shredded or similarly reduced in volume? yes no

12. Describe the general appearance of the landfill: _____

Closed portions are grass covered and fenced. Looked in good condition. Active portion is uncovered.

XIV. Incinerators

1. Is the facility using (a) incinerator (b) boiler or (c) industrial furnace in order to (a) destroy hazardous waste or (b) for any recycling purpose? (circle the appropriate ones)

2. Describe the type (include waste codes) of hazardous waste being burned at this facility.

See permit

265.341

3. Has the facility analyzed any waste that has not previously been burned in its incinerator? yes (no) N/A

If yes, did the analysis determine:

a. Heating value of the waste? yes no

b. Halogen and sulfer content of the waste? yes no

c. Concentrations of lead and mercury in the waste? yes no

If no, can the facility document that these elements are not present? yes no

265.345

4. During start-up and shut-down, is the incinerator operating at steady state conditions whenever hazardous waste is fed? (yes) no BIF - natural gas fired to bring up to temperature before burn

265.347

5. Are monitoring/inspections performed when incinerating hazardous waste? (yes) no control room - constant monitor

If yes, do they include:

a. Monitoring of existing instruments which relate to combustion and emission control at least every 15 minutes? (yes) no Continuous

b. Inspections of complete incinerator and associated equipment at least daily for leaks, spills, and fugitive emissions? (yes) no

265.351

6. Has the facility closed any of its incinerators? yes (no)

If yes, have all hazardous waste and hazardous waste residues been removed? yes no

265.352

7. Does the facility burn F020, F021, F022, F023, F026, or F027 waste? yes no

If yes, did the facility receive a proper certification from EPA indicating that it can meet the necessary performance standards when burning these wastes? yes no

XV. Thermal Treatment

1. Is the process a non-continuous (batch) process?
yes no

265.373
If no, is the process operating at steady state conditions (including temperature) before adding hazardous waste?
yes no

265.375
2. Does the facility have records to indicate that it analyzes any waste which had not previously been treated in the thermal process? yes no

If yes, did analyses include the following:

265.375(a)
a. Heating value? yes no

265.375(b)
b. Halogen content? yes no

c. Sulfer content? yes no

265.375(c)
d. Concentration of lead? yes no

e. Concentration of mercury? yes no

Note: d. and e. are not required if the facility has written documentation data that show the elements are not present.

3. Is this analytical data placed in the facility's operating record? yes no

265.377(a)(1)
4. Are the existing instruments which relate to temperature and emission control monitored at least every 15 minutes?
yes no

If yes, are appropriate corrections to maintain steady state conditions made immediately, either automatically or by the operator? yes no

265.377(a)(2)
5. Is the stack plume (emissions) observed visually at least hourly for normal appearance (color and opacity)? yes no

If yes, are operating corrections made immediately to return any visible emissions to their appearance? yes no

265.377(a)(3)

6. Is the complete thermal treatment process and associated equipment (pumps, valves, conveyors, pipes, etc.) inspected at least daily for leaks, spills and fugitive emissions?
yes no

7. Are all emergency shutdown controls and system alarms checked at least daily to assure proper operation?
yes no

8. Have any of the facility's thermal treatment units undergone closure? yes no

265.381

If yes, were all hazardous waste and hazardous waste residues removed from the thermal treatment process/equipment?
yes no

9. Is open burning of hazardous wastes conducted at this facility? yes no

265.382

If yes, is the open burning of hazardous waste restricted to waste explosives? yes no

If no, describe: _____

_____

_____

_____

10. Is open burning or detonation of waste explosives performed in accordance with the "minimum distance" requirements shown below? yes no N/A

Pounds of waste explosives or propellants	**Minimum distance from open burning or detonation to the property of others**
0 - 100	**204 m (670 feet)**
101 - 1,000	**380 m (1,250 feet)**
1,001 - 10,000	**530 m (1,730 feet)**
10,001 - 30,000	**690 m (2,260 feet)**

XVI. Chemical, Physical and Biological Treatment

Note: This section applies to the treatment of hazardous waste in units other than tanks, surface impoundments and land treatment facilities.

1. Does the treatment process and equipment exhibit any signs of excessive corrosion, deterioration or wear? yes no

If yes, describe: _____

_____

_____

_____

2. Are any of the treatment processes or equipment inoperative or do not appear to be operating properly? yes no

If yes, describe: _____

_____

_____

_____

3. Are there any leaks or other failures associated with any aspect of the facility's treatment system? yes no

If yes, describe: _____

_____

_____

_____

265.401(c)

4. Is there a means to stop waste inflow to the treatment process if the process is a continuous feed system?
yes no N/A

265.402(a)

5. If hazardous waste is to be treated which is substantially different from any waste previously treated at the facility or a substantially different process than any previously used at the facility is used to treat the waste, does the facility:

a. Conduct waste analyses and trial treatment tests (e.g., bench scale or pilot plant scale) yes no

b. Obtain written, documented information on similar treatment of similar waste? yes no

265.403(a)(1)
6. Does the facility inspect, where present, discharge control and safety equipment at least daily? yes no

265.403(a)(2)
7. Does the facility inspect, where present, data gathered from monitoring equipment at least daily? yes no

265.403(a)(3)
8. Does the facility inspect the construction materials of the treatment process or equipment at least weekly? yes no

265.403(a)(4)
9. Does the facility inspect the construction materials of, and the area immediately surrounding, discharge confinement structures at least weekly? yes no

10. Have any of the facility's treatment processes undergone closure? yes no

265.404
If yes, was all hazardous waste and hazardous waste residues removed from the treatment processes or equipment?
yes no

11. Are ignitable or reactive wastes placed in the treatment process? yes no

If yes:

265.405(a)(1)
a. Is the waste treated, rendered or mixed before or immediately after placement in the treatment process so it no longer meets the definition of ignitable or reactive? yes no

b. Is there any evidence that conditions of extreme heat or pressure, fire or explosion, violent reactions or toxic emissions occurred? yes no

If yes, describe: _____

_____

_____

_____

265.405(a)(2)
c. Is the waste protected from sources of ignition or reaction? yes no

12. Are incompatible wastes placed in the same treatment process or equipment? yes no

If yes:

265.406(a)
a. Is there any evidence that conditions of extreme heat or pressure, fire or explosion, violent reactions or toxic emissions occurred? yes no

If yes, describe: _____

_____

_____

_____

Phob 30 - Tank 1020 labelled hzw waste.

Phob 31 - Universal waste bulb

Phob 32 - Universal waste batteries

Phob 33 - Bldg 325 Chemical Cleaners 55 gal drum. Waste paint. Labeled hzw waste. SAA.

Phob 34 - Bldg 52 - SAA drum

Phob 35 - Bldg 3 - SAA waste aerosol cans.

Phob 36 - Bldg 70 - 4x5 gal hzw waste containers

Dow 90 day Storage Area. - Roof - concrete floor/dubed area.
19 x 30 gal Plastic Drums. All labeled hzw waste. 18 drums dated <90 days. No date present on one drum + label fallen off container during recent storm. Was relabeled but no date put on. Corrected at time of inspection and dated
5 x 5 gal drums contain universal waste. All labelled universal waste
Polizzi Unit - Universal waste bucket - labeled/dated

Additional Comments:

Photo 1 - GML - closed cells 1-9 towards leachate collection tank
Photo 2 - Permitted drum storage area.
Photo 3 - Former Biomass Ponds.
Photo 4 - 2nd Clarifier - WWTP
Photo 5 - pH Trim Tank
Photo 6 - Eq Sump
Photo 7 - Tank 1021
Photo 8 - Tank 1043/1044 Photo 9 - Drums in 2nd containment of 1043/1044
Photo 10 - BIF Fly Ash Drums.
Photo 11 - West End Dump Pad. 55 gal drums
Photo 12
Photo 13
Photo 14
Photo 15 Tank 4623 labeled by waste
Photo 16 - Seven Unit drums storage area (Station 710)
Photo 17 Tank 4556 labeled by waste
Photo 18 Tanks 4553/4554 not labeled by waste.
Photo 19 Tanks 4543/4544. Tanks are currently out.
Photo 20 Tank 4524
Photo 21 Tank 4505
Photo 22 MCB Aldicarb control Room SAA Container labeled as to contents
Photo 23 SAA - labeled by waste - 30 gal container
Photo 24 SAA - labeled by waste - 5 gal container
Photo 25 Burner Unit - used oil storage
Photo 26 Tank 1885 (Farm) (poly Hg waste tank)
Photo 27 Farm Warehouse. 5 drums by, 3 drums non by.
Photo 28 PMC warehouse. 8 drums by waste. 2 55 gal drums. Caulstrut resin

Bayer Crop Science > multi-tenant industrial park. 3/1/11
Institute, WV
Bayer, Dow, Praxair, Catalyst Refineries.

- Chemical manufacturer of
(East Side) Pesticide active ingredients
e.g. Sevin, Aldocarb

(West Side) Rotomet (food supplement)
Larvin (pesticide ingredient)
Carbosulfan (pesticide ingredient made for FMC.
Powerhouses (2)
(1) BIF Boilers
(2) Coal fired Plant
Cooling Water
WWTP
GML
Container Storage Area.
Storage Tanks 1021, 1043, 1044, 4623
Muse Units - closed
GW Monitoring

Plant began operations circa 1940.

Raw Materials

Variety organic chemicals. see 311 Report

Hazardous Waste Streams

WWTP Sludge (F039) → GML.

Residue Stream → BIF
(high organic waste stream with BTU value)

Fly Ash → off-site LF

Smaller container quantities - miscellaneous waste streams
tank cleanouts, process equipment cleanouts, PPE, etc.

Only Haz Waste generated by Bayer & Dow are managed by Bayer's Waste ID No.

Chemical Production Process - Varies from unit to unit. Continuous chemical. Batch chemical production. Unit specific may make the same chemical all the time or run on a campaign basis depending on market conditions

Waste Oil - equipment & vehicle maintenance activities

Universal Waste - Lamps
Batteries

1/11

Permitted Container Storage Area.

Steve - Plant Engineer
Graves. WWTP/GMZ

① weekly inspection logs OK.
Inspection logs also look at records, safety equipment and spill cleanup supplies.

② Manifests for container storage area are kept at WWTP delivery reps office.

- Concrete floored with 3 concrete curbed bays.
- Roofed
- Floors drains to WWTP
- Empty. No containers present.
- Fenced / locked.
- Spill containment & fire extinguishers.

WWTP

3 - secondary clarifiers Concrete lined below grade structures.

Biomass Ponds - closed in late 1990's. Remaining sludge in ponds fixed in placed, filled with flyash & RCRA capped (clay & soil)

- pH Treatment - no longer used. Flow thru from Aeration Tanks to Eq Sump. Fiberglass subgrade tank.
- Eq Sump - receives water from Aeration Tanks where transferred to splitters to 2nd Clarifiers. Cement tank and 3 service Concrete lined subgrade pit. Recently relined with epoxy coating.
- Filter press removes F039 Haz waste from WWTP. Filtercake is dropped into dump trailer. One trailer takes WWTP sludge to GMR approx 1 truckload/day. Sometimes 2 loads per day during higher loads. Trailer not labelled as containing haz waste, DOT placard is present. Labelled "Hazardous waste Hauler" with transporter ID number.

#1 Steam Plant Fred Heeling

<90 day storage area - No drums present.

Tank 1021 - permitted hz waste storage tank.
labeled hz waste

with 2nd containment

Tank 1043 & Tank 1044 - labeled hz waste.
(lifting pictures)
Both out of service for internal inspection.
9 x 55 gal drums of hz waste.

Haz Waste Containment Station All labeled hz waste. Dated <90 days
Satellite accumulation Container - labeled hz waste - Closed.

BIF 3 & 4. BIF 4 down for maintenance.

SAA container observed next to BIF 3 control panel.
Labeled hz waste & closed.

BIF Ash. 68 x 55 gal drums. Labeled hz waste. Dated <90 days.
Exception 1 x 55 gallon drum. No label. Fell off.
3 x 55 gallon drums. Labeled hz waste. Couldn't read date.
Facility rep. corrected immediately

Center area WWTP Sumps. Receive wastewater from process
Subgrade concrete tanks? Verify.

West end Process Water Collection West Sump
Subgrade Concrete tanks. Verify

Concrete with acid brick.

West Drum Pad 11 x 55 gal drums

* Labeled hz waste "Clean Ash" dated 1/6/11
2 Labeled Used Oil 8/17/10
Other drums are not labeled

Hz waste label partially torn off. Can't read contents or date.

Fred Lockwood will have drums moved to be removed

Seven Unit. Lee Brandt. WCC Shift Team Leader. 31/11

Tank 4623 - Permitted haz waste storage tank. Located with 2nd Containment. Labeled hazwaste. Waste from the tank transferred via tank truck to Tank 1023 for burning in B/F.

Seven Unit
Station 710 - Drum Storage Area.
No drums hazardous waste.
4 x 55 gal drums used oil. 1 drum not labeled.

Seven Unit
< 90 storage Tanks. 4556. Labeled hazwaste.
4553/4554 - out of service.
4552 - no longer in service. Removed.
4543/4544 - Naphthalene/Tetralin.
4503/4504 - Oxidation Residue. Labeled hazwaste.

MCB - 3 SAA Containers. All labeled and closed.

Seven Unit - Used Oil Storage Area. Clarence Litton - WCC Shift Team Leader
2 Drums w funnels but not labeled as used oil?
1 Drum full - no label observed.
Smaller 5 gallon drums also present but not labeled.
Product? Waste?

Tank 1885 - 90 day Haz Waste Tank. Labeled hazwaste.

Seven Warehouse - 90 day storage area. 5 x 55 gal drums hazardous waste
3 x 55 gal non hazwaste. All labeled hazwaste or non-haz as appropriate. All closed. Dated < 90 days.

FMC Warehouse. < 90 day haz waste storage area. 8 drums. Labeled hazwaste. Dated < 90 days.

Used oil storage. 9 drums. Couldn't read labels on 3 drums.

3/2/11

Tank 1020. 90 day storage tank. Doug Myl - EHS Delivery Rep.

Universal waste storage shed. Several containers (boxes, etc) labeled to contain universal waste lamps. All containers with bulbs were labeled and dated.

Also contained universal waste batteries. All batteries were labeled and dated < 1yr.

- Bldg 325 Chemical Cleaners.
  Paint waste storage drum. Labeled hazardous waste.
  Drum full. Started new drum & place waste paint into new drum.

- Building 52 - ~~central~~ Electrical Shop
  SAA - Waste Aerosol cans. Labeled hazardous waste

- Building 3 - observed 4 used oil drums. Labeled as used oil

- Bldg 3 Battery Room. SAA container. Labeled hazardous waste

- Bld 70 Lab Interim waste storage Area - 4 x 5 gal containers labeled hazardous waste. Dated < 90 days.

Chuck Staley - EHS Delivery Rep (DOW) Janet Lawson (DOW)
Andy Attman (DOW)
Cindy Eilbes (DOW)

Glycol
Acetone
Polyox
90 day storage

Glycol Recovery Area
- Tank 1405 - labeled RCRA Methanol Waste Hazardous Waste. 10K
- Tank 1406 Labeled the same. 10K
with diked area. Clean.

Cellosize West - SAA Containers labeled hazardous waste

Bldg 161
- Tank 1016 - labeled Hazardous waste with 2nd Containment

Attachment 2
Location Map

April 15, 2011

http://oaspub.epa.gov/enviro/lrt_viewer.map_page?sys_acrnm=RCRAINFO&sys_id=WVD005005509
Last updated on Monday, February 28, 2011

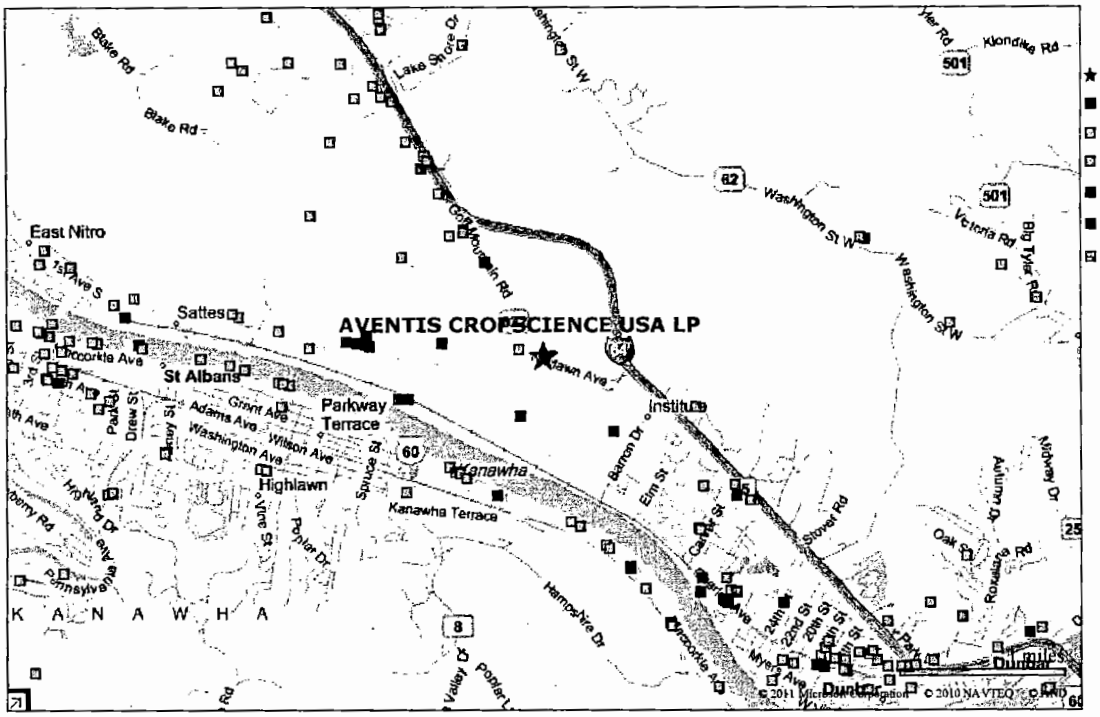
Locational Reference Tables (LRT)

Facility Location Information

Report an Error

Locational Information

AVENTIS CROPSCIENCE USA LP
ROUTE 25 AND INTERSTATE 64
INSTITUTE WV 25112
Latitude: 38.387894 Longitude: -81.77705



Legend

- ★ Selected facility
- ■ Multi-activities
- ■ Superfund
- ■ Toxic releases
- ■ Water dischargers
- ■ Air emissions
- ■ Hazardous waste

The latitude and longitude coordinates above come from the Envirofacts Locational Reference Tables (LRT). The method used to derive the Most Accurate Coordinates was INTERPOLATION-MAP. These coordinates correspond to UNKNOWN and represent the best location for the facility.

Query executed on FEB-28-2011